

Major:

## Chemistry (B.A.)

The Bachelor of Arts degree is for those who want a core of chemistry courses with a broader background in the liberal arts.

Students interested in chemical engineering can participate in the [Engineering Dual-Degree Program](#). Chemical Engineering students complete either a B.A. or B.S. degree in Chemistry at NWU and any remaining engineering program requirements at one of our participating schools of engineering.

For students interested in studying [pre-health](#), a program of study emphasizing a strong background in chemistry is available for students planning a future in medicine.

### Departments/Programs:

Chemistry

### Chemistry Major (B.A.\*\* , 31-32 hours)

| Courses   |           |
|---|-----------|
| CHEM 1110 Chemical Principles I and<br>CHEM 1110L Chemical Principles I Laboratory                          | 4 hours   |
| CHEM 1120 Chemical Principles II and<br>CHEM 1120L Chemical Principles II Laboratory                        | 4 hours   |
| CHEM 2100 Organic Chemistry I and<br>CHEM 2100L Organic Chemistry I Laboratory                              | 4 hours   |
| CHEM 2110 Organic Chemistry II: Synthesis and Mechanisms and<br>CHEM 2110L Organic Chemistry II Laboratory  | 4 hours   |
| CHEM 3090 Organic Chemistry III: Intermediate Organic Chemistry   | 2 hours   |
| CHEM 3510 Physical Chemistry I, Thermodynamics and Kinetics and<br>CHEM 3510L Physical Chemistry Laboratory | 4 hours   |
| CHEM 3440 Analytical Chemistry and Instrumental Analysis  | 4 hours   |
| One upper-level (3000-4990) chemistry course  | 3 hours   |
| CHEM 4980 Chemistry Seminar   | 1 hour    |
| Capstone  |           |
| CHEM 4950 Independent Study or<br>CHEM 4960 Special Projects  | 1-2 hours |

An approved supporting program of 20 hours is required and may include one or more minors. PHYS 1600 Principles of Physics I or PHYS 2000 General Physics I and PHYS 1700 Principles of Physics II or PHYS 2100 General Physics II and MATH 1600 Calculus I are required, and MATH 1610 Calculus II is strongly recommended.

*\*This Chemistry major earns a B.A. degree. However, if a student has a first major that is associated with a different baccalaureate degree, the Chemistry major may serve as a second major for the degree associated with the first major (B.F.A., B.M., B.S.N.). Note that if the first major is associated with a B.S. degree, then the Chemistry major requirements for a B.S. degree must be met, or the student must earn two degrees.*